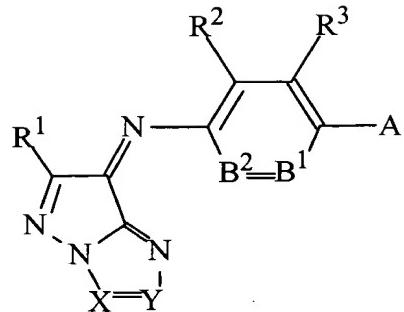


a
cont.
Formula (1)



wherein R¹ represents a hydrogen atom, aliphatic group, aromatic group, heterocyclic group, cyano, -OR¹¹, -SR¹², -CO₂R¹³, -OCOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁷R¹⁸, -SO₂R¹⁹, SO₂NR²⁰R²¹, -NR²²CONR²³R²⁴, -NR²⁵CO₂R²⁶, -COR²⁷, -NR²⁸COR²⁹ or -NR³⁰SO₂R³¹, and R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰ and R³¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein A represents -NR⁴R⁵ or a hydroxyl group, and R⁴ and R⁵ each represents independently a hydrogen atom, aliphatic group, aromatic group or heterocyclic group; wherein B¹ represents =C(R⁶)- or =N- and B² represents -C(R⁷)= or -N=; wherein R², R³, R⁶ and R⁷ each represents independently a hydrogen atom, halogen atom, aliphatic group, aromatic group, heterocyclic group, cyano, -OR⁵¹, -SR⁵², -CO₂R⁵³, -OCOR⁵⁴, -NR⁵⁵R⁵⁶, -CONR⁵⁷R⁵⁸, -SO₂R⁵⁹, -SO₂NR⁶⁰R⁶¹, -NR⁶²CONR⁶³R⁶⁴, NR⁶⁵CO₂R⁶⁶, -COR⁶⁷, -NR⁶⁸COR⁶⁹ or -NR⁷⁰SO₂R⁷¹, and R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰ and R⁷¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein R² and R³, R³ and R⁴, R⁴ and R⁵, R⁵ and R⁶, or R⁶ and R⁷ are optionally mutually bound to form a

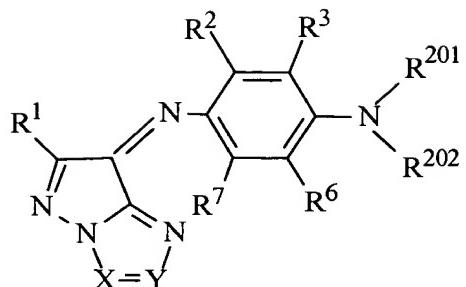
*a!
cont.*

ring; wherein X and Y each represents independently C(R⁸)= or N=, R⁸ represents a hydrogen atom, aliphatic group or aromatic group, either X or Y shall represent N=, and X and Y shall not be simultaneously -N=; and wherein in the formula (1), two or more substituent groups represented by -NR¹⁷⁰SO₂R¹⁷¹ are present in the dye, and R¹⁷⁰ and R¹⁷¹ each represents independently a hydrogen atom, aliphatic group or aromatic group.

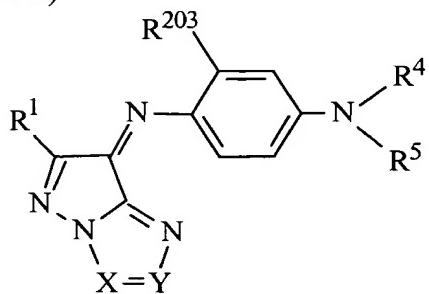
2. (Amended) An ink for an ink jet according to claim 1, wherein the oil-soluble dye is at least one compound represented by any one of formulae (2-1) to (2-5):

a
cont.

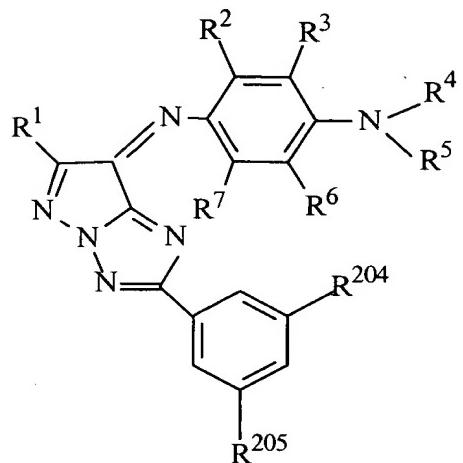
(2 - 1)



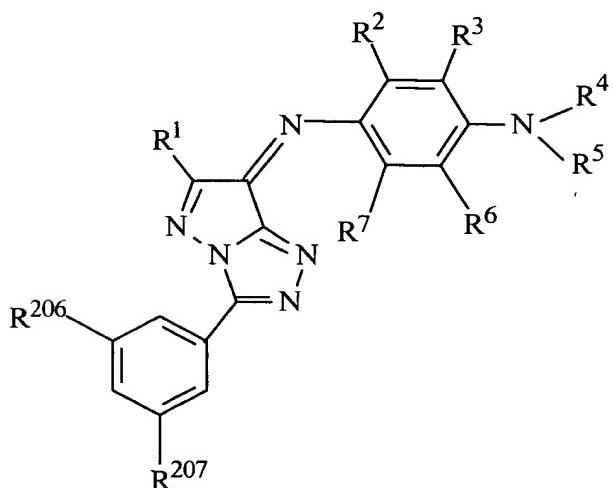
(2 - 2)



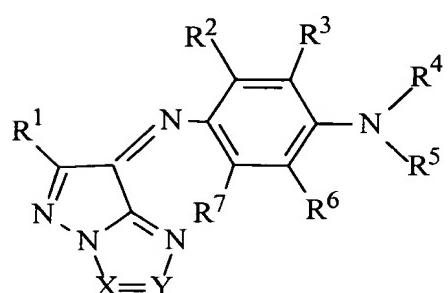
(2 - 3 a)



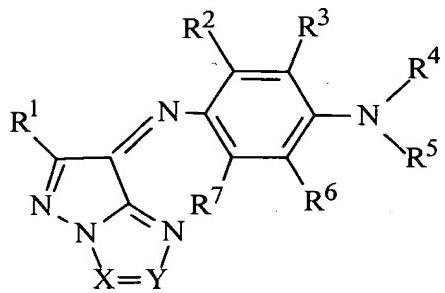
(2 - 3 b)



(2 - 4)



(2 - 5)



(A)
cont'd

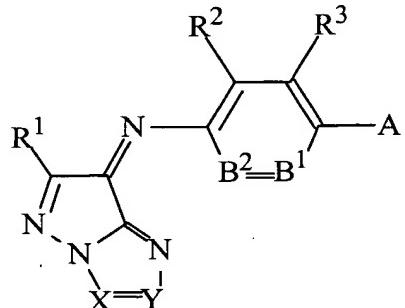
wherein in the formulae (2-1) to (2-5) X, Y, R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ have the same meanings as defined with respect to the formula (1); wherein in the formula (2-1) R²⁰¹ and R²⁰² each represents a C₁₋₁₈ alkyl group having a substituent group, the substituent group is at least one member selected from the group consisting of a heterocyclic group, cyano, -OR¹⁴¹, -SR¹⁴², -CO₂R¹⁴³, -OCOR¹⁴⁴, -NR¹⁴⁵R¹⁴⁶, -CONR¹⁴⁷R¹⁴⁸, -SO₂R¹⁴⁹, -SO₂NR¹⁵⁰R¹⁵¹, -NR¹⁵²CONR¹⁵³R¹⁵⁴, -NR¹⁵⁵CO₂R¹⁵⁶, -COR¹⁵⁷, -NR¹⁵⁸COR¹⁵⁹ and -NR¹⁶⁰SO₂R¹⁶¹, and R¹⁴¹, R¹⁴², R¹⁴³, R¹⁴⁴, R¹⁴⁵, R¹⁴⁶, R¹⁴⁷, R¹⁴⁸, R¹⁴⁹, R¹⁵⁰, R¹⁵¹, R¹⁵², R¹⁵³, R¹⁵⁴, R¹⁵⁵, R¹⁵⁶, R¹⁵⁷, R¹⁵⁸, R¹⁵⁹, R¹⁶⁰ and R¹⁶¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein in the formula (2-2) R²⁰³ represents a C₁₋₁₀ substituted alkyl group; wherein in the formulae (2-3a) and (2-3b), R²⁰⁴, R²⁰⁵, R²⁰⁶ and R²⁰⁷ each represents independently a cyano or a group having no more than C₁₀₀ selected from the group consisting of an aliphatic group, aromatic group, heterocyclic group, -OR²¹¹, -SR²¹², -CO₂R²¹³, -OCOR²¹⁴, -NR²¹⁵R²¹⁶, -CONR²¹⁷R²¹⁸, -SO₂R²¹⁹, -SO₂NR²²⁰R²²¹, -NR²²²CONR²²³R²²⁴, -NR²²⁵CO₂R²²⁶, -COR²²⁷, -NR²²⁸COR²²⁹ and -NR²³⁰SO₂R²³¹, and R²¹¹, R²¹², R²¹³, R²¹⁴, R²¹⁵, R²¹⁶, R²¹⁷, R²¹⁸, R²¹⁹, R²²⁰, R²²¹, R²²², R²²³, R²²⁴, R²²⁵, R²²⁶, R²²⁷, R²²⁸, R²²⁹, R²³⁰ and R²³¹ each represent independently a hydrogen atom, aliphatic group or aromatic group; wherein in the formula (2-4) at least one of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, and R⁸ has substituent groups represented by -NR²⁷¹SO₂R²⁷², two or more substituent groups represented by -NR²⁷¹SO₂R²⁷² are contained in the dye, and R²⁷¹ and R²⁷² and each represents independently a hydrogen atom, aliphatic group or aromatic group; and wherein in the formula (2-5) at least one of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, and R⁸ has one or more water-soluble groups.

a²
12. (Amended) An ink for an ink jet according to claim 1, wherein the coloring particulates are obtained by emulsifying and making into fine particles an organic solvent which includes the polymer and the oil-soluble dye, by either adding water to the organic solvent, or adding the organic solvent into water.

a³
15. (Amended) A coloring composition comprising:

- (a) a dispersion medium; and
- (b) coloring particulates comprising:
 - (b-1) a polymer which is selected from the group consisting of polyurethanes, polyesters, polyamides, polyureas and polycarbonates; and
 - (b-2) an oil-soluble dye represented by formula (1):

Formula (1)



wherein R¹ represents a hydrogen atom, aliphatic group, aromatic group, heterocyclic group, cyano, -OR¹¹, -SR¹², -CO₂R¹³, -OCOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁷R¹⁸, -SO₂R¹⁹, -SO₂NR²⁰R²¹, -NR²²CONR²³R²⁴, -NR²⁵CO₂R²⁶, -COR²⁷, -NR²⁸COR²⁹, -NR³⁰SO₂R³¹, and R¹¹,

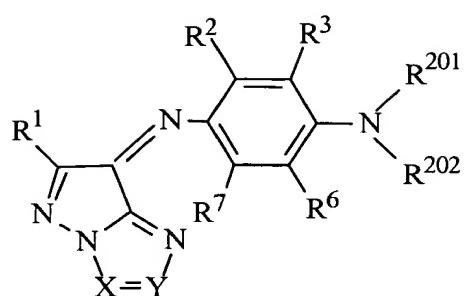
a^b
cont.

R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰ and R³¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein A represents -NR⁴R⁵ or a hydroxyl group, and R⁴ and R⁵ each represents independently a hydrogen atom, aliphatic group, aromatic group or heterocyclic group; wherein B¹ represents =C(R⁶)- or =N- and B² represents -C(R⁷)= or -N=; wherein R², R³, R⁶ and R⁷ each represents independently a hydrogen atom, halogen atom, aliphatic group, aromatic group, heterocyclic group, cyano, -OR⁵¹, -SR⁵², -CO₂R⁵³, -OCOR⁵⁴, -NR⁵⁵R⁵⁶, -CONR⁵⁷R⁵⁸, -SO₂R⁵⁹, -SO₂NR⁶⁰R⁶¹, -NR⁶²CONR⁶³R⁶⁴, -NR⁶⁵CO₂R⁶⁶, -COR⁶⁷, -NR⁶⁸COR⁶⁹ -NR⁷⁰SO₂R⁷¹, and R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰ and R⁷¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein R² and R³, R³ and R⁴, R⁴ and R⁵, R⁵ and R⁶, or R⁶ and R⁷ are optionally mutually bound to form a ring; wherein X and Y each represents independently C(R⁸)= or N=, R⁸ represents a hydrogen atom, aliphatic group or aromatic group, either X or Y shall represent N=, and X and Y shall not be simultaneously -N=; and wherein in the formula (1), two or more substituent groups represented by -NR¹⁷⁰SO₂R¹⁷¹ are present in the dye, and R¹⁷⁰ and R¹⁷¹ each represents independently a hydrogen atom, aliphatic group or aromatic group.

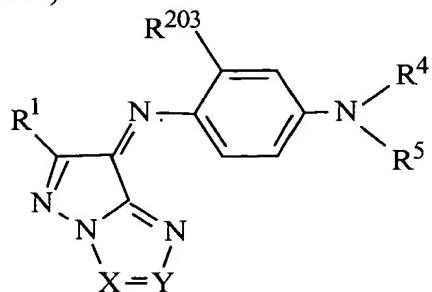
16. (Amended) A coloring composition according to claim 15, wherein the oil-soluble dye is at least one compound represented by any one of formulae (2-1) to (2-5):

a3
cont.

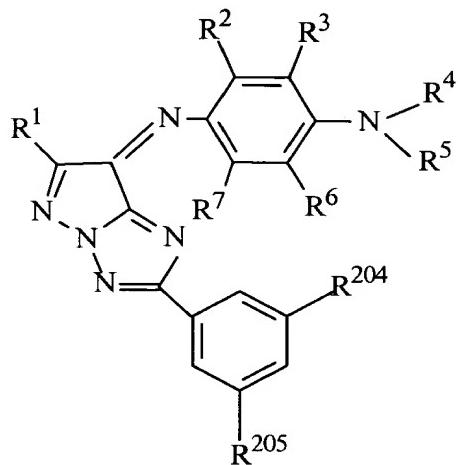
(2-1)



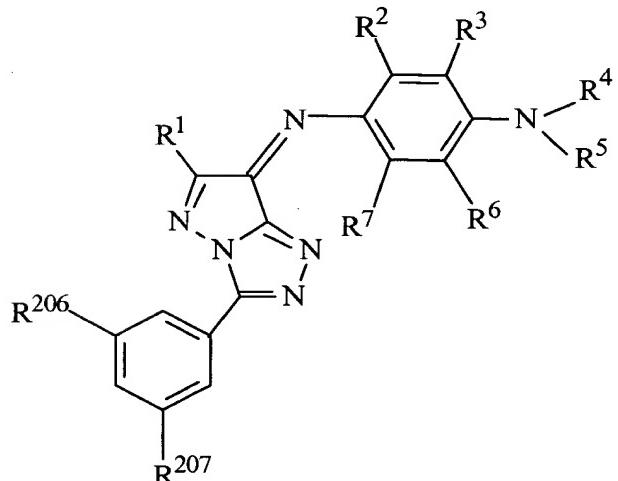
(2-2)



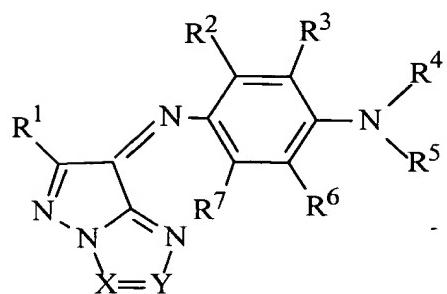
(2-3 a)



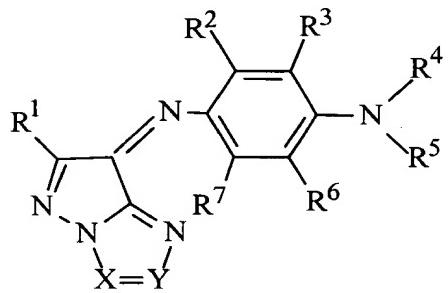
(2-3 b)



(2-4)



(2-5)



*A3
cont.*

wherein in the formulae (2-1) to (2-5) X, Y, R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ have the same meanings as defined with respect to the formula (1); wherein in the formula (2-1) R²⁰¹ and R²⁰² each represents a C₁₋₁₈ alkyl group having a substituent group, the substituent group is at least one member selected from group consisting of a heterocyclic group, cyano, -OR¹⁴¹, -SR¹⁴², -CO₂R¹⁴³, -OCOR¹⁴⁴, -NR¹⁴⁵R¹⁴⁶, -CONR¹⁴⁷R¹⁴⁸, -SO₂R¹⁴⁹, -SO₂NR¹⁵⁰R¹⁵¹, -NR¹⁵²CONR¹⁵³R¹⁵⁴, -NR¹⁵⁵CO₂R¹⁵⁶, -COR¹⁵⁷, -NR¹⁵⁸COR¹⁵⁹ and -NR¹⁶⁰SO₂R¹⁶¹, and R¹⁴¹, R¹⁴², R¹⁴³, R¹⁴⁴, R¹⁴⁵, R¹⁴⁶, R¹⁴⁷, R¹⁴⁸, R¹⁴⁹, R¹⁵⁰, R¹⁵¹, R¹⁵², R¹⁵³, R¹⁵⁴, R¹⁵⁵, R¹⁵⁶, R¹⁵⁷, R¹⁵⁸, R¹⁵⁹, R¹⁶⁰ and R¹⁶¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein in the formula (2-2) R²⁰³ represents a C₁₋₁₀ substituted alkyl group; wherein in the formulae (2-3a) and (2-3b), R²⁰⁴, R²⁰⁵, R²⁰⁶ and R²⁰⁷ each represents independently a cyano or a group having no more than C₁₀₀ selected from the group consisting of an aliphatic group, aromatic group, heterocyclic group, -OR²¹¹, -SR²¹², -CO₂R²¹³, -OCOR²¹⁴, -NR²¹⁵R²¹⁶, -CONR²¹⁷R²¹⁸, -SO₂R²¹⁹, -SO₂NR²²⁰R²²¹, -NR²²²CONR²²³R²²⁴, -NR²²⁵CO₂R²²⁶ -COR²²⁷, NR²²⁸COR²²⁹ and -NR²³⁰SO₂R²³¹, and R²¹¹, R²¹², R²¹³, R²¹⁴, R²¹⁵, R²¹⁶, R²¹⁷, R²¹⁸, R²¹⁹, R²²⁰, R²²¹, R²²², R²²³, R²²⁴, R²²⁵, R²²⁶, R²²⁷, R²²⁸, R²²⁹, R²³⁰ and R²³¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein in the formula (2-4) at least one of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, and R⁸ has substituent groups represented by -NR²⁷¹SO₂R²⁷², two or more substituent groups represented by -NR²⁷¹SO₂R²⁷² are contained in the dye, and R²⁷¹ and R²⁷² each represents independently a hydrogen atom, aliphatic group or aromatic group; and wherein in the formula (2-5) at least one of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, and R⁸ has one or more water-soluble groups.

a⁴
18. (Amended) An ink jet recording method comprising the steps of:

- (1) preparing an ink for an ink jet; and
- (2) using the ink for recording in an ink-jet printing device;

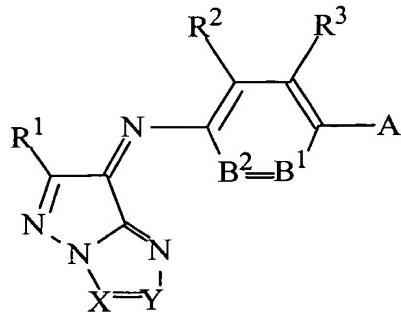
wherein the ink comprises a coloring composition comprising:

- (a) a dispersion medium; and
- (b) coloring particulates comprising:

(b-1) a polymer which is selected from the group consisting of polyurethanes, polyesters, polyamides, polyureas and polycarbonates; and

(b-2) an oil-soluble dye represented by formula (1):

Formula (1)



wherein R¹ represents a hydrogen atom, aliphatic group, aromatic group, heterocyclic group, cyano, -OR¹¹, -SR¹², -CO₂R¹³, -OCOR¹⁴, -NR¹⁵R¹⁶, -CONR¹⁷R¹⁸, -SO₂R¹⁹, -SO₂NR²⁰R²¹, -NR²²CONR²³R²⁴, -NR²⁵CO₂R²⁶-COR²⁷, -NR²⁸COR²⁹ or -NR³⁰SO₂R³¹, and R¹¹, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸, R¹⁹, R²⁰, R²¹, R²², R²³, R²⁴, R²⁵, R²⁶, R²⁷, R²⁸, R²⁹, R³⁰ and R³¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein

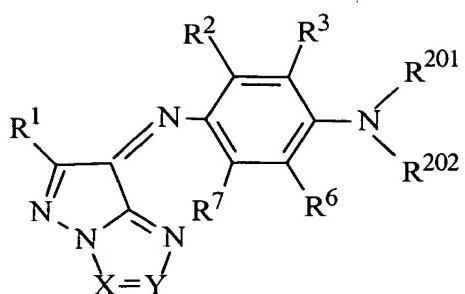
*at 4
cont.*

A represents - NR⁴R⁵ or a hydroxyl group, and R⁴ and R⁵ each represents independently a hydrogen atom, aliphatic group, aromatic group or heterocyclic group; wherein B¹ represents =C(R⁶)- or =N- and B² represents -C(R⁷)= or -N=; wherein R², R³, R⁶ and R⁷ each represents independently a hydrogen atom, halogen atom, aliphatic group, aromatic group, heterocyclic group, cyano, -OR⁵¹, -SR⁵², -CO₂R⁵³, -OCOR⁵⁴, -NR⁵⁵R⁵⁶, -CONR⁵⁷R⁵⁸, -SO₂R⁵⁹, -SO₂NR⁶⁰R⁶¹, -NR⁶²CONR⁶³R⁶⁴, -NR⁶⁵CO₂R⁶⁶, -COR⁶⁷, -NR⁶⁸COR⁶⁹ or -NR⁷⁰SO₂R⁷¹, and R⁵¹, R⁵², R⁵³, R⁵⁴, R⁵⁵, R⁵⁶, R⁵⁷, R⁵⁸, R⁵⁹, R⁶⁰, R⁶¹, R⁶², R⁶³, R⁶⁴, R⁶⁵, R⁶⁶, R⁶⁷, R⁶⁸, R⁶⁹, R⁷⁰ and R⁷¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein R² and R³, R³ and R⁴, R⁴ and R⁵, R⁵ and R⁶, or R⁶ and R⁷ are optionally mutually bound to form a ring; wherein X and Y each represents independently C(R⁸)= or N=, R⁸ represents a hydrogen atom, aliphatic group or aromatic group, either X or Y shall represent N=, and X and Y shall not be simultaneously -N=; and wherein in the formula (1), two or more substituent groups represented by -NR¹⁷⁰SO₂R¹⁷¹ are present in the dye, and R¹⁷⁰ and R¹⁷¹ each represents independently a hydrogen atom, aliphatic group or aromatic group.

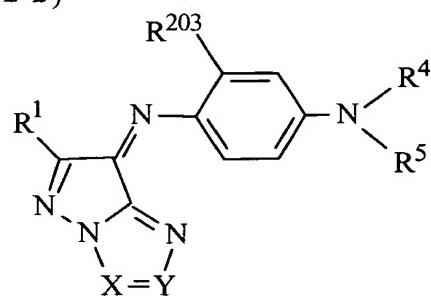
19. (Amended) An ink jet recording method according to claim 18, wherein the oil-soluble dye is at least one compound represented by any one of formulae (2-1) to (2-5):

*a +
cont.*

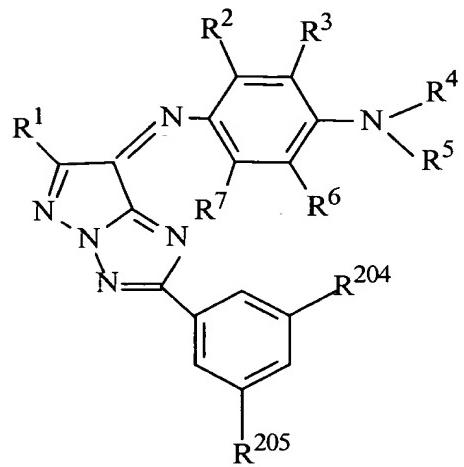
(2 - 1)



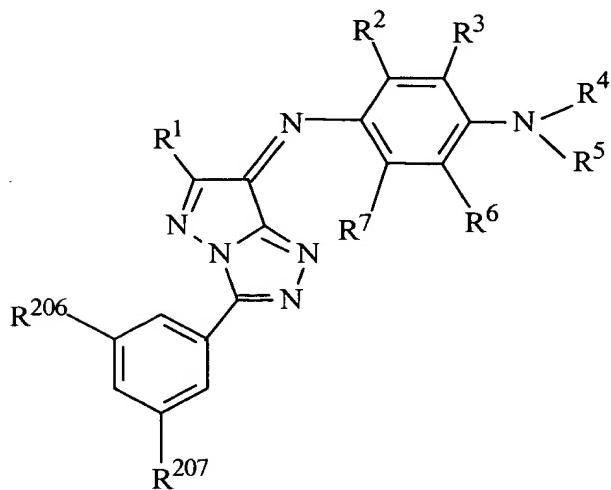
(2 - 2)



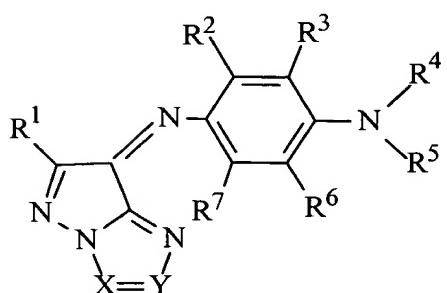
(2 - 3 a)



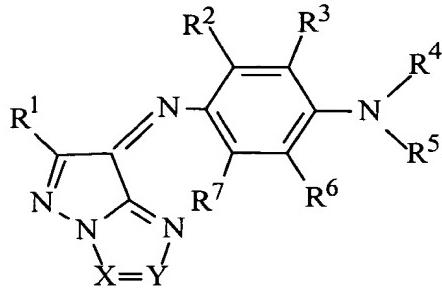
(2 - 3 b)



(2 - 4)



(2 - 5)



*A
cont.*

wherein in the formulae (2-1) to (2-5) X, Y, R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ have the same meanings as defined with respect to the formula (1); wherein in the formula (2-1) R²⁰¹ and R²⁰² each represents a C₁₋₁₈ alkyl group having a substituent group, the substituent group is at least one member selected from group consisting of a heterocyclic group, cyano, -OR¹⁴¹, -SR¹⁴², -CO₂R¹⁴³, -OCOR¹⁴⁴, -NR¹⁴⁵R¹⁴⁶, -CONR¹⁴⁷R¹⁴⁸, -SO₂R¹⁴⁹, -SO₂NR¹⁵⁰R¹⁵¹, -NR¹⁵²CONR¹⁵³R¹⁵⁴, -NR¹⁵⁵CO₂R¹⁵⁶ -COR¹⁵⁷, -NR¹⁵⁸COR¹⁵⁹ and -NR¹⁶⁰SO₂R¹⁶¹, and R¹⁴¹, R¹⁴², R¹⁴³, R¹⁴⁴, R¹⁴⁵, R¹⁴⁶, R¹⁴⁷, R¹⁴⁸, R¹⁴⁹, R¹⁵⁰, R¹⁵¹, R¹⁵², R¹⁵³, R¹⁵⁴, R¹⁵⁵, R¹⁵⁶, R¹⁵⁷, R¹⁵⁸, R¹⁵⁹, R¹⁶⁰ and R¹⁶¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein in the formula (2-2) R²⁰³ represents a C₁₋₁₀ substituted alkyl group; wherein in the formulae (2-3a) and (2-3b), a R²⁰⁴, R²⁰⁵, R²⁰⁶ and R²⁰⁷ each represents independently a cyano or a group having no more than C₁₀₀ selected from the group consisting of an aliphatic group, aromatic group, heterocyclic group, -OR²¹¹, -SR²¹², -CO₂R²¹³, -OCOR²¹⁴, -NR²¹⁵R²¹⁶, -CONR²¹⁷R²¹⁸, -SO₂R²¹⁹, -SO₂NR²²⁰R²²¹, -NR²²²CONR²²³R²²⁴, -NR²²⁵CO₂R²²⁶ -COR²²⁷, -NR²²⁸COR²²⁹ and -NR²³⁰SO₂R²³¹, and R²¹¹, R²¹², R²¹³, R²¹⁴, R²¹⁵, R²¹⁶, R²¹⁷, R²¹⁸, R²¹⁹, R²²⁰, R²²¹, R²²², R²²³, R²²⁴, R²²⁵, R²²⁶, R²²⁷, R²²⁸, R²²⁹, R²³⁰ and R²³¹ each represents independently a hydrogen atom, aliphatic group or aromatic group; wherein in the formula (2-4) at least one of R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ has substituent groups represented by -NR²⁷¹SO₂R²⁷², two or more substituent groups represented by -NR²⁷¹SO₂R²⁷² are contained in the dye, and R²⁷¹ and R²⁷² each represents independently a hydrogen atom, aliphatic group or aromatic group; and wherein in the formula (2-5) at least one of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, and R⁸ has one or more water-soluble groups.

Please add new claims 21-23 as follows:

- a5*
-
- 21. (new) The ink for an ink jet according to claim 1, wherein R⁸ represents a substituted aryl group.
 - 22. (new) The coloring composition according to claim 15, wherein R⁸ represents a substituted aryl group.
 - 23. (new) The ink jet recording method according to claim 18, wherein R⁸ represents a substituted aryl group. --
-